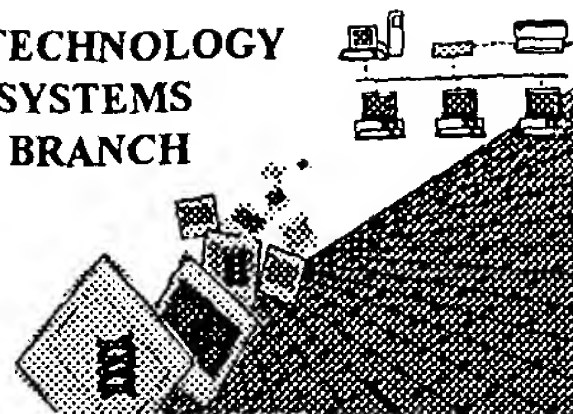


✓ jin

#14

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/720,383B
Source: 1600 RUSA
Date Processed by STIC: 11/18/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

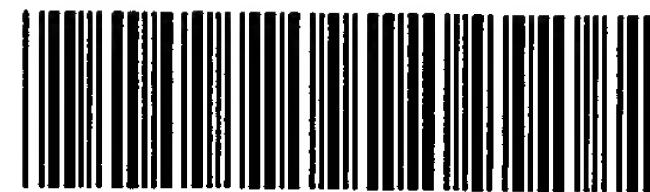
<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202



1600

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

3 <110> APPLICANT: Stephen M. Allen
 4 Gary M. Fader
 5 Saverio Carl Falco
 6 Anthony J. Kinney
 7 Jonathan E. Lightner
 8 Guo-Hua Miao
 9 J. Antoni Rafalski
 10 Catherine J. Thorpe
 12 <120> TITLE OF INVENTION: Plant Cellulose Synthases
 14 <130> FILE REFERENCE: BB-1170
 16 <140> CURRENT APPLICATION NUMBER: 09/720,383B
 17 <141> CURRENT FILING DATE: 2000-12-21
 19 <150> PRIOR APPLICATION NUMBER: 60/092,844
 20 <151> PRIOR FILING DATE: 1998-07-14
 22 <160> NUMBER OF SEQ ID NOS: 29
 24 <170> SOFTWARE: Microsoft Office 97

Does Not Comply
 Corrected Diskette Needed

pp 1-20

ERRORED SEQUENCES

26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 1221
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Hordeum vulgare
 31 <400> SEQUENCE: 1
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 33 60
 E--> 34 catgccacca cgaccttgtt tcaagggttc tgcgccaatc aatctctctg accgtctcaa
 35 120
 E--> 36 tcaagttctc cggtgggctc ttgggtcagt tgaaattctg ttagcagac attgtcctat
 37 180
 E--> 38 ctggtacaat tacggtgggc ggttgaaact tctggagagg atggttaca tcaacacat
 39 240
 E--> 40 tgtttatcca ataacatccc ttccacttat cgcctattgt gtgcttctg ctatctgtct
 41 300
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 43 360
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 45 420
 E--> 46 cgaggactgg tggagaaacg agcagttctg ggttattggt ggcacatctg cccatctttt
 47 480
 E--> 48 cgcagtgttc cagggctctgc tgaagggtgt ggccgggatt gacaccaact tcacggttac
 49 540

global
 format
 error
 60
 120
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 see
 Item 1 on
 Error summary
 sheet

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/720,383B

DATE: 11/18/2002

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

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 51 600
 E--> 52 tctcctcatt cctccgacca ccgtccttgt gattaacctg gtgggcatgg tggcaggcat
 53 660
 E--> 54 atcatatgcc atcaacagcg gttaccagtc ttgggggtcca ctcttcggaa agctcttctt
 55 720
 E--> 56 ctcaatctgg gtgacccctc atctctaccc cttcctcaag ggtctcatgg ggaagcagaa
 57 780
 E--> 58 ccgcacgcca accatcgtca ttgtttggtc catcctccta gcctccatct tctccctcct
 59 840
 E--> 60 gtgggtgaag atcgaccctt tcatatccga taccagaaa gccgtcgcca tggggcagtg
 61 900
 E--> 62 tggcgtcaac tgctgatcgg cgccgaagag tatctgcccc cctcgtgtaa ataccggagg
 63 960
 E--> 64 gggttggatg ggattttgtt gttgtagatg aagacggagt tttatgtaag ttattattgc
 65 1020
 E--> 66 cccttcgtgc tgagaagcac aaaccgtgaa gcctacgaaa cctgcagcgt acattgtgat
 67 1080
 E--> 68 ttttttctcc tttctttttc atctgtgata cctgtttgtt cttcttagag tatattatgt
 69 1140
 E--> 70 cagaacgtat ctatagttct atacacacta tgacaccaac tatttatata aggcagctgt
 71 1200
 E--> 72 tgcataact cttctgcaaa a
 73 1221
 138 <210> SEQ ID NO: 3
 139 <211> LENGTH: 3776
 140 <212> TYPE: DNA
 141 <213> ORGANISM: Zea mays
 143 <400> SEQUENCE: 3
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 145 60
 E--> 146 aagcgtgtcc ctccccctcc ctactcccg ttctattcca ttcccccca gacgccgcta
 147 120
 E--> 148 ccgccgccgc cgcaacgacg cttgccccgg gatctggaga tctggtagcg ccagggggat
 149 180
 E--> 150 ggaggccagc gccgggctgg tcgccggctc gcacaaccgg aacgagctcg tcgtcatccg
 151 240
 E--> 152 ccgcgatggc gagccagggc cgaagcccat ggaccagcgg aacggccagg tgtgccagat
 153 300
 E--> 154 ttgcggcgac gacgtggggc gcaaccccga cggggagccg ttcgtggcct gcaacgagtg
 155 360
 E--> 156 cgccttcccc atctgccggg actgctacga gtacgagcgc cgcgagggca cgcagaactg
 157 420
 E--> 158 cccccagtgc aagacccgct tcaagcgctt caaggggtgc gcgcgcgtgc ccggggacga
 159 480
 E--> 160 ggaggaggac ggcgtcgacg acctggagaa cgagttcaac tggagcgaca agcacgactc
 161 540
 E--> 162 ccagtacctc gccgagtcca tgctccacgc ccacatgagc tacggccgcg gcgccgacct
 163 600

*same
error*

same

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 164 cgacggcgtg ccgcagccat tccaccccat ccccaatgtt cccctcctca ccaacggaca
 165 660
 E--> 166 gatggtcgat gacatcccgc cggaccagca cgcccttggt ccctcggtcg tgggtggcgg
 167 720
 E--> 168 ggggaagagg attcaccctc tcccgtacgc ggatcccaac cttcctgtgc aaccgaggtc
 169 780
 E--> 170 tatggaccct tccaaggatc tcgccgcata tggctacggg agcgtagcat ggaaggagag
 171 840
 E--> 172 gatggagagc tggaagcaga agcaggagag gatgcaccag acgaggaacg atggcggcgg
 173 900
 E--> 174 cgatgatggt gatgatgcag atctaccact aatggatgaa gctagacagc cattgtccag
 175 960
 E--> 176 aaagatcccg cttccttcaa gccaaatcaa cccctatagg atgattataa taattcggct
 177 1020
 E--> 178 agtggttttg tgtttcttct tccactaccg agtgcagcat ccggtgcctg atgcatttgc
 179 1080
 E--> 180 tttatggctc atatctgtga tctgtgaaat ttggtttgcc atgtcttgga ttcttgacca
 181 1140
 E--> 182 gtttccaaag tggtttcta tcgagaggga aacctatctt gaccggctga gtttaagggt
 183 1200
 E--> 184 tgacaaggaa gggcatcctt ctcaactcgc ccctgttgat ttctttgtca gtacgggtga
 185 1260
 E--> 186 tcccttgaag gaacctccat tggtcactgc taatactgtt ctatctatcc tttcgggtga
 187 1320
 E--> 188 ttatccagtt gataagggtt catgctacgt ttctgatgat ggtgctgcca tgctgacatt
 189 1380
 E--> 190 tgaagcattg tctgaaacat ctgaatttgc aaagaaatgg gttcctttct gcaaaagata
 191 1440
 E--> 192 tagccttgag cctcgtgctc cagagtggta cttccaacag aagatagact acctgaaaga
 193 1500
 E--> 194 caaggtggcg ccaaactttg ttagagaacg gagagcaatg aagagagagt atgaggaatt
 195 1560
 E--> 196 caaggtcaga atcaatgcct tggttgctaa agcccaaaag gttcctgagg aaggatggac
 197 1620
 E--> 198 aatgcaggat ggaactccat ggcccggaag taatgtccgt gatcatcctg gaatgattca
 199 1680
 E--> 200 ggttttccct ggtcaaagtg gtggccatga tgtggaagga aatgagctgc ctcgattggt
 201 1740
 E--> 202 ttatgtttca agagaaaaac ggccaggcta caaccatcac aagaaggctg gtgctatgaa
 203 1800
 E--> 204 tgcattggct cgagtctctg ctgtactaac taatgctcct tatttgctga acttggattg
 205 1860
 E--> 206 tgatcactat atcaataata gtaaggctat aaaggaagca atgtgtttta tgatggatcc
 207 1920
 E--> 208 tttgcttgga aagaaagttt gctatgtgca gtttcctcaa agatttgatg ggattgatcg
 209 1980
 E--> 210 ccatgatcga tatgctaaca gaaatgttgt ctttttcgat atcaacatga aaggtttgga
 211 2040
 E--> 212 tggatatccag ggcccaattt atgtgggtac tggatgtgtc ttcagaaggc aggcattata

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

213 2100
E--> 214 tggctacgat gctcccaaaa caaagaagcc accatcaaga acttgcaact gctggccaaa
215 2160
E--> 216 gtgggtgcatt tgctgttgct gttttggttaa caggaagacc aagaagaaga ccaagacctc
217 2220
E--> 218 taaacctaaa ttgagaaga taaagaaact tttaagaaa aaggaaaatc aagcccctgc
219 2280
E--> 220 atatgctctt ggtgaaattg atgaagccgc tccaggagct gaaaatgaaa aggctagtat
221 2340
E--> 222 tgtaaatcaa cagaagttgg aaaagaaatt tggccagtct tcagtttttg ttgcatccac
223 2400
E--> 224 acttcttgag aatggtggaa ccctgaagag tgccagtcca gcttctcttc tgaaggaagc
225 2460
E--> 226 tatacatgtc atcagttgtg gatatgaaga caaacaggc tggggaaaag atattggttg
227 2520
E--> 228 gatttatgga tcagtcacag aagatattct tactgggttt aagatgcact gccatgggtg
229 2580
E--> 230 gcggtcaatt tactgcatac ctaaacgggc cgccttcaaa ggttccgcac ctctcaatct
231 2640
E--> 232 ttccgatcgt cttcaccagg ttcttcggtg ggctcttggt tcaattgaaa tttctctcag
233 2700
E--> 234 caaccactgc cctctctggt atgggtatgg tgggtgacta aagttcctgg aaaggttttc
235 2760
E--> 236 gtacattaac tccatcgtat acccttggac atctatcccg ctcttggcct attgcacatt
237 2820
E--> 238 gcctgccatc tgcttgetga cagggaatt tatcacgcca gagcttaaca atgttgccag
239 2880
E--> 240 cctctgggtc atgtcacttt tcatctgcat ttttgctacg agcatcctgg aatgagatg
241 2940
E--> 242 gagtgggtga ggcacgatg actggtggag aaacgagcag ttttgggtca ttggaggcgt
243 3000
E--> 244 gtcttcacat ctctttgctg tgttccaggg actcctcaag gtcatactg gtgtagacac
245 3060
E--> 246 gagcttcact gtgacatcca agggcggaga cgacgaggag ttctcagagc tgtacacatt
247 3120
E--> 248 caaatggacg acccttctga tacctccgac aacctgctc ctactgaact tcattggagt
249 3180
E--> 250 ggtagctggc atctccaatg cgatcaacaa cggatatgaa tcatggggcc ccctgttcgg
251 3240
E--> 252 gaagctcttc tttgcatttt ggggtgacgt ccatctttac ccgttcctca agggctctgg
253 3300
E--> 254 tgggaggcag aacaggacgc caacgattgt cattgtctgg tccatcctcc tggcttcgat
255 3360
E--> 256 cttctcgtg ctttgggtcc ggatcgaccc gttccttgcg aaggatgatg gtcccctgtt
257 3420
E--> 258 ggaggagtgt ggtctggatt gcaactagga ggtcagcacg tggacttccc cgtcagtgtg
259 3480
E--> 260 tggtcgaaga agtatttttg cagatgtttt gtgccatat ttcttttttc aatttttgtc
261 3540



RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 262 cctctgtaga tagaaacaag gggagaaggg gaaaaaaagt acttgtatatt cttttgttcc
263 3600

E--> 264 atggtggtgg tgggtggtgg cggtcagcc tcgtgagtgc agtattgggc aaaccggagg
265 3660

E--> 266 ctgcggcaac cttgtgcagt tcggccacga atatactagg gaagatcgog accaatcaat
267 3720

E--> 268 caatcgatga ccgagttcaa ttgttcagca aaaaaaaaaa aaaaaaaaaa aaaaaa
269 3776

493 <210> SEQ ID NO: 5
494 <211> LENGTH: 1189
495 <212> TYPE: DNA
496 <213> ORGANISM: Zea mays
498 <400> SEQUENCE: 5

E--> 499 gcacgagacc gagtggggca aggagattgg gtggatctat gggtcggtga cagaggatat
500 60

E--> 501 cctgacgggg ttcaagatgc actgccgggg gtggaagtcc gtgtactgca cgccgacacg
502 120

E--> 503 gccggcgctt aaggggtcgg cgcccatcaa cttgtctgat cgtctccacc aggtgctgog
504 180

E--> 505 ctgggcgctg gggtcggtgg agatcttcat gagccgccac tgcccgctct ggtacgccta
506 240

E--> 507 cggcggccgg ctcaagtggc tggagcgctt cgcctacacc aacaccatcg tgtaccctt
508 300

E--> 509 cacctccatc ccgctcctcg cctactgcac catcccgcc gtctgcctgc tcaccggcaa
510 360

E--> 511 gttcatcatt ccacgctga acaacctgc cagcatctgg ttcatcgcg tcttctctgc
512 420

E--> 513 catcatcgcg acgagcgctc tggagctgog gtggagcggg gtgagcatcg aggactggtg
514 480

E--> 515 gcgcaacgag cagttctggg tcacggcggg cgtgtccgog catctcttgg ccgtgttcca
516 540

E--> 517 gggcttcttc aaggttctgg gggcggtgga caccagcttc accgtcacct ccaaggcggc
518 600

E--> 519 cggcgacgag gccgacgcct tcggggacct ctacctcttc aagtggacca ccctgctggt
520 660

E--> 521 gccccccacc acgctcatca tcatcaacat ggtgggcata gtggccggcg tgtccgacgc
522 720

E--> 523 cgtaacaac ggctacggct cctggggccc gctcttcggc aagctcttct tctccttctg
524 780

E--> 525 ggtcactgct cacctctacc cgttctctca ggggctcatg gggaggcaga accggacgcc
526 840

E--> 527 caccatcgct gtgctctggt ccactctct cgcctccatc ttctcgctcg tctgggtcag
528 900

E--> 529 gatcgaccog tttatccoga aggccaaggg ccccatcttc aagccatgog gactcgagtg
530 960

E--> 531 ctgagctcac ctagctacct tcttgttgca tgtacggacg ccgccgtgog tttggacata
532 1020

E--> 533 caggcacttt tgggcccagg tactcatggt cgactttttt ttttaattttg tacaagattt
534 1080

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

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Output Set: N:\CRF4\11182002\I720383B.raw

E--> 535 gtgatcgagt gactgagtga gacagagtgt tgggtgtaag aactgtgatg gaattcactc
536 1140

E--> 537 aaattaatgg acattttttt tcttcaactg caaaaaaaaa aaaaaaaaaa
538 1189
606 <210> SEQ ID NO: 7
607 <211> LENGTH: 3786
608 <212> TYPE: DNA
609 <213> ORGANISM: Zea mays
611 <400> SEQUENCE: 7

E--> 612 ccacagctca tataccaaga gccggagcag cttagcgcag ccagagcgg cgccgcgcca
613 60

E--> 614 agcacaaccc ccacccgcca cagccgcgtg cgcattgtgag cggtcgccc gcccgggaga
615 120

E--> 616 ccagaggagg ggaggactac gtgcatttcg ctgtgcgcc gccgcggggt tcgtgcgca
617 180

E--> 618 gcgagatccg gcggggcggg gcggggggcc tgagatggag gctagcgcgg ggctggtggc
619 240

E--> 620 cggetcgcgcat aaccggaacg agctggtggt gatccgcgcg gaccgcgagt cgggagccgc
621 300

E--> 622 gggcgggcggc gcggcgcgcc gggcgagggc gccgtgccag atatgcggcg acgaggtcgg
623 360

E--> 624 ggtgggcttc gacggggagc ccttcgtggc gtgcaacgag tgcgccttcc ccgtctgccg
625 420

E--> 626 cgcctgctac gactacgagc gccgcgaggg ctgcgaagcg tgccgcgagt gcaggaccgc
627 480

E--> 628 ctacaagcgc ctcaagggtt gccgcggggt ggccggcgac gaggaggagg acggcgctga
629 540

E--> 630 cgacctggag ggagagttcg gcctgcagga cggcgccgcc cacgaggacg accgcagta
631 600

E--> 632 cgtcgccgag tccatgctca gggcgagat gagctacggc cgcggcgggc acgcgcaccc
633 660

E--> 634 cggcttcagc ccgtcccca acgtgcgct cctcaccaac ggccagatgg ttgatgacat
635 720

E--> 636 cccgccggag cagcacgcgc tcgtgccgtc ctacatgagc ggcggcgggc gcgggggcaa
637 780

E--> 638 gaggatccac ccgtccctt tcgcagatcc caaccttcca gtgcaaccga gatccatgga
639 840

E--> 640 cccgtccaag gatctggccg cctacggata tggcagcgtg gcctggaagg agagaatgga
641 900

E--> 642 gggctggaag cagaagcagg agcgctgca gcatgtcagg agcgagggtg gcggtgattg
643 960

E--> 644 ggatggcgac gatgcagatc tgccactaat ggatgaagct aggcagccat tgtccagaaa
645 1020

E--> 646 agtccctata tcatcaagcc gaattaatcc ctacaggatg attatcgtaa tccggttggt
647 1080

E--> 648 ggttttgggt ttcttcttcc actaccgagt gatgcaccc gcgaaagatg catttgcat
649 1140

E--> 650 gtggctcata tctgtaatct gtgaaatctg gtttgcatg tcctggattc ttgatcagtt
651 1200

same

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 652 cccaaagtgg cttccaatcg agagagagac ttacctggac cgtttgtcac taaggtttga
 653 1260
 E--> 654 caaggaaggt caaccctctc agcttgctcc aatcgacttc tttgtcagta cggttgatcc
 655 1320
 E--> 656 caciaaaggaa cctcccttgg tcacagcgaa cactgtcctt tccatccttt ctgtggatta
 657 1380
 E--> 658 tccggttgag aaggtctcct gctatgtttc tgatgatggg gctgcaatgc ttacgtttga
 659 1440
 E--> 660 agcattgtct gaaacatctg aatttgcaaa gaaatggggt cctttcagca aaaagttaa
 661 1500
 E--> 662 tatcgagcct cgtgctcctg agtggtactt ccaacagaag atagactacc tgaaagacaa
 663 1560
 E--> 664 ggttgctgct tcatttggtta gggagaggag ggcgatgaag agagaatacg aggaattcaa
 665 1620
 E--> 666 ggtaaggatc aatgccttgg ttgcaaaagc ccaaaagggt cctgaggaag gatggacaat
 667 1680
 E--> 668 gcaagatgga agcccctggc ctggaaacaa cgtacgcgat catcctggaa tgattcaggt
 669 1740
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 671 1800
 E--> 672 tgtctcgaga gaaaagaggc caggttataa ccatcacaag aaggctggtg ccatgaatgc
 673 1860
 E--> 674 actggtccgt gtctctgctg tcttatcaaa tgctgcatac ctattgaact tggactgtga
 675 1920
 E--> 676 tcactacatc aacaatagca aggcataaa agaggctatg tgtttcatga tggatccttt
 677 1980
 E--> 678 ggtggggaag aaagtgtgct atgtacagtt ccctcagagg tttgatggta ttgacaaaaa
 679 2040
 E--> 680 tgatcgatac gctaacagga acgttgtctt ttttgacatc aacatgaaag gtttggacgg
 681 2100
 E--> 682 tattcaagga cccatttatg tgggtactgg atgtgttttc agacggcagg cactgtatgg
 683 2160
 E--> 684 ttatgatgct cctaaaacga agaagccacc atcaagaact tgcaactgct ggcccaagtg
 685 2220
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 689 2340
 E--> 690 gggtgaaatt gatgaaggtg ctccaggtgc tgatatcgag aaggccggaa tcgtaaatca
 691 2400
 E--> 692 acagaaacta gagaagaaat ttgggcagtc ttctgttttt gtcgcatcaa cacttcttga
 693 2460
 E--> 694 gaacggaggg accctgaaga gcgcaagtcc agcttctctt ctgaaggaag ctatacatgt
 695 2520
 E--> 696 tatcagctgc ggctacgaag acaagaccga ctggggaaaa gagattggct ggatttacgg
 697 2580
 E--> 698 atcgatcaca gaggatatct tgactggatt taagatgcac tgccatggct ggcggtctat
 699 2640
 E--> 700 ttactgcatc ccgaagcggc ctgcattcaa aggttctgcg cctctgaacc tttccgaccg

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

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701 2700
E--> 702 tcttcaccag gtccttcgct gggcccttgg gtccgtcgaa attttcttca gcaagcactg
703 2760
E--> 704 cccacttttg tacggatacg gcggcgggct aaaattcctg gaaagggttt cttatatcaa
705 2820
E--> 706 ctccatcggt tatccctgga cgtccattcc tctcctggct tactgtacct tgcctgccat
707 2880
E--> 708 ctgcctgctc acggggaagt ttatcacacc agagcttacc aatgtcgcca gtatctgggt
709 2940
E--> 710 catggcactt ttcattctga tctccgtgac cggcatcctg gaaatgaggt ggagtggcgt
711 3000
E--> 712 ggccatcgac gactgggtgga ggaacgagca gttctgggtc atcggaggcg tttcggcgca
713 3060
E--> 714 tctgttcgcg gtgttccagg gcctgctgaa ggtgttcgcc ggcatcgaca cgagcttcac
715 3120
E--> 716 cgtgacgtcg aaggccgggg acgacgagga gttctcggag ctgtacacgt tcaagtggac
717 3180
E--> 718 caccctgctg atacccccga ccacgctcct cctgctgaac ttcacggggg tggaggccgg
719 3240
E--> 720 gatctcgaac gcgatcaaca acgggtacga gtctgtgggc ccctgttcg ggaagctctt
721 3300
E--> 722 cttcgccttc tgggtgatcg tccacctgta cccgttcctc aagggtctgg tggggaggca
723 3360
E--> 724 gaacaggacg ccgacgatcg tcacgtctg gtccatcctg ctggcctcga tcttctcgt
725 3420
E--> 726 cctgtgggtc cgcgtcgacc cgttcctcgc caagagcaac ggcccgtcc tggaggagt
727 3480
E--> 728 tggcctggac tgcaactgaa gtggggggccc cctgtcactc gaagttctgt cacgggcaaa
729 3540
E--> 730 ttacgcctga ttttttgttg ttgttggtgt tgggaattctt tgctgtagat agaaaccaca
731 3600
E--> 732 tgtccacggc atctctgctg tgtccattgg agcaggagag aggtgcctgc tgctgtttgt
733 3660
E--> 734 tgagtaaatt aaaagtttta aagttataca gtgatgcaca ttccagtgcc cagtgtattc
735 3720
E--> 736 ccttttttaca gtctgtatat tagcgacaaa ggacatattg gttaggagtt tgattctttt
737 3780
E--> 738 gtaaaa
739 3786
966 <210> SEQ ID NO: 9
967 <211> LENGTH: 3936
968 <212> TYPE: DNA
969 <213> ORGANISM: Zea mays
971 <400> SEQUENCE: 9
E--> 972 cttctccctc gtccgtgcgg cgtggcgcggt ctcggcggtc ggtgagaaac cactcggggg
973 60
E--> 974 atgaggatct gctgctagag tgagaggagc tacggtcagt atcctctgcc ttcgtcggcg
975 120
E--> 976 gcggaagtgg aggggaggaa gcgatggagg cgagcgccgg gctggtggcc ggctcccaca

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

977 180
E--> 978 accgcaacga gctcgtcgtc atccgccgcg acggcgatcc cgggccgaag ccgccgcggg
979 240
E--> 980 agcagaacgg gcaggtgtgc cagatttgcg gcgacgacgt cggccttgcc cccggcgggg
981 300
E--> 982 accccttcgt ggcgtgcaac gagtgcgcct tccccgtctg ccgggactgc tacgaatacg
983 360
E--> 984 agcgccggga gggcacgcag aactgcccc agtgcaagac tcgatacaag cgcctcaagg
985 420
E--> 986 gctgccaacg tgtgaccggt gacgaggagg aggacggcgt cgatgacctg gacaacgagt
987 480
E--> 988 tcaactggga cggccatgac tcgcagtctg tggccgagtc catgctctac ggccacatga
989 540
E--> 990 gctacggccg tggaggtgac cctaattggcg cgccacaagc tttccagctc aaccccaatg
991 600
E--> 992 ttccactcct caccaacggg caaatggtgg atgacatccc accggagcag caccgcgtgg
993 660
E--> 994 tgccttcttt catgggtggt gggggaaaga ggatacatcc ccttccttat gcggatcca
995 720
E--> 996 gcttacctgt gcaaccagg tctatggacc catccaagga tcttgctgca tatgggtatg
997 780
E--> 998 gtagtggtgc ttggaaggaa cggatggaga attggaagca gagacaagag aggatgcacc
999 840
E--> 1000 agacggggaa tgatggtggt ggtgatgatg gtgacgatgc tgatctacca ctaatggatg
1001 900
E--> 1002 aagcaagaca acaactgtcc aggaaaatc cacttccatc aagccagatt aatccatata
1003 960
E--> 1004 ggatgattat cattattcgg cttgtggttt tggggttctt cttccactac cgagtgatgc
1005 1020
E--> 1006 atccggtgaa tgatgcattt gctttgtggc tcatatctgt tatctgtgaa atctggtttg
1007 1080
E--> 1008 ccatgtcttg gattcttgat caattcccaa agtggttccc tattgagaga gagacttacc
1009 1140
E--> 1010 tagaccgget gtcactgagg ttcgacaagg aaggccagcc atctcaactt gctccaattg
1011 1200
E--> 1012 atttctttgt cagtaagggt gatcccttaa aggaacctcc tttggtcaca acaaatactg
1013 1260
E--> 1014 ttctatctat cctttcgggtg gattatcctg ttgataaggt ttcttgctat gtttctgatg
1015 1320
E--> 1016 atgggtgctgc aatgctaacg tttgaagcat tatctgaaac atctgaattt gcaaagaaat
1017 1380
E--> 1018 gggttccttt ctgcaaacgg tacaatattg aacctcgcgc tccagagtgg tacttccaac
1019 1440
E--> 1020 agaagataga ctacttgaaa gacaagggtg cagcaaactt tgtagggag aggagagcaa
1021 1500
E--> 1022 tgaagagaga gtatgaggaa ttcaagggtga gaatcaatgc cttagttgcc aaagcccaga
1023 1560
E--> 1024 aagttcctga agaaggatgg acaatgcaag atggaacccc ctggcctgga aacaatgttc
1025 1620

same

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 1026 gtgatcatcc tggaaatgatt caggtcttcc ttggccaaag cggaggcctt gactgtgagg
 1027 1680
 E--> 1028 gaaatgaact gccacgattg gtttatgttt ctagagagaa acgaccaggc tataaccatc
 1029 1740
 E--> 1030 ataagaaagc tgggtgctatg aatgcattgg tccgagtctc tgctgtacta acaaattgctc
 1031 1800
 E--> 1032 catatttggt aaacttggat tgtgatcact acatcaacaa cagcaaggct ataaaggaag
 1033 1860
 E--> 1034 caatgtgttt tatgatggac cctttactag gaaagaagggt ttgctatgta cagttccctc
 1035 1920
 E--> 1036 aaagatttga tgggattgat cgccatgacc gatatgctaa ccggaatgtt gtcttttttg
 1037 1980
 E--> 1038 atatcaacat gaaagggttg gatgggtattc aggggtccaat ttatgttgggt actggatgtg
 1039 2040
 E--> 1040 tatttagaag gcaggcatta tatgggttatg atgcccccaa aacaaagaag ccaccatcaa
 1041 2100
 E--> 1042 ggacttgcaa ctgctggccc aagtgggtgct tttgctgttg ctgctttggc aataggaagc
 1043 2160
 E--> 1044 aaaagaagac taccaaacc aaacagaga agaaaaagtt attatttttc aagaaagaag
 1045 2220
 E--> 1046 agaaccaatc ccctgcatat gctcttggtg aaattgacga agctgctcca ggagctgaga
 1047 2280
 E--> 1048 atgaaaaggc cggtattgta aatcaacaaa aattagaaaa gaaatttggc caatcttctg
 1049 2340
 E--> 1050 tttttgttac atccacactt ctcgagaatg gtggaacctt gaagagtgca agtcctgctt
 1051 2400
 E--> 1052 ctcttttgaa agaagctata catgtcatta gttgtgggta tgaagacaag acagactggg
 1053 2460
 E--> 1054 gaaaagagat tggctggatc tatggatcag ttacagaaga tattctaact ggtttcaaga
 1055 2520
 E--> 1056 tgcattgtca tgggtggcgg tcaatttact gcatacctaa acgggttgca ttcaaagggt
 1057 2580
 E--> 1058 ctgcacctct gaatctttca gatcgtcttc accagggtgct tcgggtgggct cttgggtcta
 1059 2640
 E--> 1060 ttgagatctt cttcagcaat cattgccctc tttgggtatgg gtatgggtggc ggtctgaaat
 1061 2700
 E--> 1062 ttttggaag attttcttac atcaactcca tcgtgtatcc ttggacatct attcccctct
 1063 2760
 E--> 1064 tggcttactg tacattgcct gccatctggt tattgacagg gaaatttatc actccagagc
 1065 2820
 E--> 1066 tgaataatgt tgccagcctg tggttcatgt cactttttat ctgcattttt gctacgagca
 1067 2880
 E--> 1068 tcctagaaat gagatggagt ggtgttgga ttgatgactg gtggaggaat gagcagttct
 1069 2940
 E--> 1070 ggggtcattgg aggtgtgtcc tcacacctct ttgctgtgtt ccagggactt ctcaagggtca
 1071 3000
 E--> 1072 tagctgggtg tgatacaagc ttcaccgtga catcaaaggg tggagatgat gaggagtctt
 1073 3060
 E--> 1074 cagagctata tacattcaaa tggactacct tattgatacc tcctaccacc ttgcttctat

same

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Output Set: N:\CRF4\11182002\I720383B.raw

1075 3120
E--> 1076 tgaacttcat tgggtgtggc gctggcggtt caaatgcgat caataacgga tatgagtcac
1077 3180
E--> 1078 ggggccccct ctttggaag ctattctttg cattttgggt gattgtccat ctttatccct
1079 3240
E--> 1080 ttctcaaagg tttggttga aggcaaaaca ggacaccaac gattgtcatc gtctgggtcca
1081 3300
E--> 1082 ttctgtggc ttcaatcttc tcgctccttt gggttcggat tgatccttcc cttgcgaagg
1083 3360
E--> 1084 atgatgggtcc gcttcttgag gagtgtgggt tggattgcaa ctaggatgtc agtgcacag
1085 3420
E--> 1086 ctcccccaat ctgcatatgc ttgaagtata ttttctgggt tttgtcccca tattcagtgt
1087 3480
E--> 1088 ctgtagataa gagacatgaa atgtcccaag tttcttttga tccatgggtga acctacttaa
1089 3540
E--> 1090 tatctgagag atatactggg ggaaaatgga ggctgcggca atccttgtgc agttggggccg
1091 3600
E--> 1092 tgggaatacag catatgcaag tggttgattg tgcagcatc tttattactt ggtcgcaata
1093 3660
E--> 1094 tagatgggct gagccgaaca gcaagggtatt ttgattctgc actgctcccg tgtacaaact
1095 3720
E--> 1096 tggttctcaa taaggcaggc agaatgcat ctgccagtgg aacagagcaa cctgcacatt
1097 3780
E--> 1098 atttatgtat gcctgttcat tggagggctt gttcattaca tgttcgtcta tactagaaaa
1099 3840
E--> 1100 aacagaatat tagcattaat ctatagttaa ttaaagtatg taaatgcgcc tgttttttgt
1101 3900
E--> 1102 tgtgtactgt aatcatctga gttgggtttg tgaaaa
1103 3936
1315 <210> SEQ ID NO: 11
1316 <211> LENGTH: 1138
1317 <212> TYPE: DNA
1318 <213> ORGANISM: Oryza sativa
1320 <400> SEQUENCE: 11
E--> 1321 cgctgctccc ggcgatggac gtgttcgtca ccaccgccga ccccgacaag gagccgcgcg
1322 60
E--> 1323 tcgccacggc gaacaccgtg ctgtccatat atcctcgccg cgggctaccc cgccggcaag
1324 120
E--> 1325 gtgacgtgct atatttccga cgacgcaggc gcggaggtga cacgtaacgc ggtcgtggag
1326 180
E--> 1327 gcggcccggt tcgcggcgct ttgggtgtcg ttctgccgga agcacggcgt cgagccgagg
1328 240
E--> 1329 aacctggagg cgtacttcaa cgccggcgag ggtggtggtg gcaaggcgaa ggtggtggcg
1330 300
E--> 1331 agggggagct acagggggat ggcgtggccg gagctggtgc gcgacaggag acgggtgcgc
1332 360
E--> 1333 cgcgagtacg aggagatgcg gctgcggatc gacgcgctgc aggcgcgcga tgcgcgcgcg
1334 420
E--> 1335 cggcgcgcgc gcgcggccga tgaccacgcc ggagttgtgc aggtactgat cgattttgct

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

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1336 480
E--> 1337 gggagcgtgc cacagctcgg cgttgccaac gggagcaagc tcatecagct cgcctctgtc
1338 540
E--> 1339 gacgtgtgcc tcccggcgct tgtgtacgtg tgccgcgaga agcgcgcggg ccacgcgcac
1340 600
E--> 1341 caccggaagg cgggcgccat gaacgcgccc ttcatectcg acctcgactg cgactactac
1342 660
E--> 1343 gtcaacaact cgcaggccct ccgcgcgggc atctgcttca tgatcgaacg cggcggcggc
1344 720
E--> 1345 ggagccgccc aagacgcggg cgcggtcgcg ttcgccagct tcccgcagcg ggtcgacggc
1346 780
E--> 1347 gtcgateccg gcgaccgcta cgccaaccac aaccgcgtcc tcttcgactg caccgagctc
1348 840
E--> 1349 ggccctcgacg gcctccaggg ccccatctac gtccggcaccg gctgcttgtt ccgcctgtgc
1350 900
E--> 1351 gcgctctaca gcgtcgacct gccgcgctgg agaccgcggc gttcattggg ctgtcgccca
1352 960
E--> 1353 ctccggagaag acgagcggct atgggtccagg atgaaacaaa tggtaatatt aagtgggtcca
1354 1020
E--> 1355 aggtgaaaaa ctccagctaaa acctgaccca agctgtaaca tgggtaaaaa tatatggccc
1356 1080
E--> 1357 aaaatgaaat ttactttttt ttttttacca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
1358 1138
1432 <210> SEQ ID NO: 13
1433 <211> LENGTH: 3517
1434 <212> TYPE: DNA
1435 <213> ORGANISM: Glycine max
1437 <400> SEQUENCE: 13
E--> 1438 gcacgagcca acaacaacac ccttatgtgg acacattagg tgagggtcaa cagctagcac
1439 60
E--> 1440 caatcttctt tcataaaaca caaacctttg atcacacaat ctcaccttaa tttgtgttgt
1441 120
E--> 1442 tgtttgtgcc ttcccatatt gtccattca ctaagacatg gaagccagcg ctggactggg
1443 180
E--> 1444 cgctgggtca cataaccgca atgagctagt tgtcattcat ggccatgaag agccgaaggc
1445 240
E--> 1446 tttgaagaac ttggatgggc aagtgtgtga gatttgtggg gatggcgtgg gactcacggg
1447 300
E--> 1448 ggatggagac ttgtttgtgg cttgcaatga gtgtggtttt ccagtgtgca ggccttgcta
1449 360
E--> 1450 tgagtatgaa aggagagaag gaagccacct ttgccacag tgcaaaacca gatacaagcg
1451 420
E--> 1452 tctcaaaggg agcccccgag tggagggaga tgatgatgaa gaggatgtgg atgatattga
1453 480
E--> 1454 gcatgaattc aatattgatg agcaaaagaa caagcatggc caggttgcag aagccatgct
1455 540
E--> 1456 tcatgggagg atgagctatg gaagaggtcc tgaagatgat gacaattccc agttcccaac
1457 600
E--> 1458 acctgtcatt gctgggtggc gttctaggcc tgtaagtggg gagttcccaa tatcatctaa

*same**same*

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

1459 660
E--> 1460 tgcttatggg gatcagatgt tatectcttc actgcataaa agagtgcac catatccagt
1461 720
E--> 1462 gtctgaacct ggaagtgcaa gatgggacga aaaaaaaga agatggatgg aaagatagaa
1463 780
E--> 1464 tggatgactg gaaattgcag caaggcaatt tggggcctga accggatgaa gatccagatg
1465 840
E--> 1466 cagccatgtt agatgaagca aggcaaccac tgtcaaggaa agtgccaata gcatccagca
1467 900
E--> 1468 aaatcaatcc atatagaatg gtgattgtgg cacgtctggg tattcttggc ttcttcctca
1469 960
E--> 1470 gatacagact catgaacca gtacatgatg ccctggggct atggctaacc tctatcatat
1471 1020
E--> 1472 gtgaaatctg gtttgctttt tcatggatc tggatcagtt tcccaaattg ttcccatg
1473 1080
E--> 1474 atagagagac ctacctgac cgtctttcca tcaggatga gcgtgaagg gaaccaaca
1475 1140
E--> 1476 tgcttgctcc tgtagatgtt tttgttagta ccgtggatcc catgaaggaa cctcctctgg
1477 1200
E--> 1478 ttacagcaaa cactgttctt tcaatcttgg ccatggatta cccggttgat aaaatatcat
1479 1260
E--> 1480 gctacatttc tgatgatgga gcctcaatgt gtacatttga gtccttatca gaaactgcag
1481 1320
E--> 1482 agtttgctag aaagtgggta ccgttttgta agaaattttc catagaacct cgggcacctg
1483 1380
E--> 1484 agatgtactt cagcgagaag attgactacc taaaggacaa agtgcaaccc acctttgtta
1485 1440
E--> 1486 aggagcgtcg agctatgaag agggaaatag aagagtttaa ggtaggatac aatgcacttg
1487 1500
E--> 1488 ttgctaaggc ccagaaagtt cctcaggag gatggatcat gcaggatggg acaccatggc
1489 1560
E--> 1490 cagggaataa cactaaggat catcctggta tgattcaagt gtttcttggg agcagtggag
1491 1620
E--> 1492 gtcttgatac tgaaggaaac caacttcctc gccttggtta tgtttccaga gagaaaaggc
1493 1680
E--> 1494 ctgggtttca acaccacaag aaagctggg ccatgaatgc tctgggtcgg gtatctgctg
1495 1740
E--> 1496 ttctcacaaa tgctcctttc atgttgaact tggattgtga tcaactatgtc aataacagca
1497 1800
E--> 1498 aggtgccccg agaggccatg tgcttcttga tggaccaca aactgggaag aaggtctgct
1499 1860
E--> 1500 atgtccagtt tctcacaaga tttgatggta ttgatacaca tgatcgttat gccaacagga
1501 1920
E--> 1502 acacagtttt ctttgatatt aacatgaagg gtctagatgg tattcaaggc cctgtatatg
1503 1980
E--> 1504 tggggactgg atgtgttttc aggaggcaag ctttgatgg ctataatcct cccaagggtc
1505 2040
E--> 1506 caaagcgtcc aaaaatggta agctgtgatt gttgcccggt ttttgggaagc cgcaagaagt
1507 2100

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 1508 ataaggagaa gaatgatgca aatggagagg ctgcaagcct aaaagggatg gatgatgaca
 1509 2160
 E--> 1510 aagaggtggt gatgtcccaa atgaattttg agaagaaatt tggacaatcc tctatttttg
 1511 2220
 E--> 1512 tgactttctac cttgatggaa gaggggtggtg tgcctccttc ttcaagtcca gctgccctgc
 1513 2280
 E--> 1514 ttaaagaagc cattcatgtg attagctgtg gatatgaaga taaaactgaa tggggacttg
 1515 2340
 E--> 1516 agcttggttg gatctatgga tctatcacag aagatattct aacagggttt aagatgcatt
 1517 2400
 E--> 1518 gccgtgggtg gaggtccatt tattgtatgc caaagagagc tgcattcaag ggtactgctc
 1519 2460
 E--> 1520 ctatcaactt gtcagatcgt ctcaaccagg ttcttcgttg ggcacttggt tccattgaga
 1521 2520
 E--> 1522 ttttcttttag tcaccattgc cctctatggt atggcttcaa ggaaaagaag ctaaagtggc
 1523 2580
 E--> 1524 ttgagagatt tgcctatgca aacacaactg tctatccatt cacctccatt cctctagttg
 1525 2640
 E--> 1526 cctactgtat tcttccagca gtttgtttac tcaactgacaa attcatcatg ccaccgatta
 1527 2700
 E--> 1528 gcacctttgc tggtttgtag tttgttgctc tcttctcttc aatcattgca actggtattc
 1529 2760
 E--> 1530 ttgagttgaa atggagtgga gtgagcattg aggaatggtg gagaaatgag cagttttggg
 1531 2820
 E--> 1532 tcattggtgg tgtatcagct cacctctttg ctgttataca aggtctgcta aaggttctgg
 1533 2880
 E--> 1534 ctggaattga caccaatttc actgttacat caaaggcaac agatgatgaa gagtttggag
 1535 2940
 E--> 1536 aattgtacac ctttaagtgg actacactct tgattcctcc aaccactatt ttgatcatta
 1537 3000
 E--> 1538 acattgtttg tgttggtgct ggaatctcag atgccataaa caatgggtac caatcctggg
 1539 3060
 E--> 1540 gaccactctt tggaaagctc ttcttttctc tctgggtgat tgtccatctc tatccattcc
 1541 3120
 E--> 1542 ttaaagggtt gatgggtcgc caaaatcgca caccacccat tgttggtgatt tggtcagtgc
 1543 3180
 E--> 1544 tattggcctc tattttctcc ttactttggg taagaattga tccatttgtc ctcaagacta
 1545 3240
 E--> 1546 agggacctga taccaagcta tgtggaatca actgctaaaa aagactgctt tccctatagt
 1547 3300
 E--> 1548 attattcttt aaaagatgta tgtagggtag atacattctt ggtttcacia accaacaag
 1549 3360
 E--> 1550 tggcaatgca caaggatcaa taaggaaaga gtgaaaattt tgtgtatcat aatgagtg
 1551 3420
 E--> 1552 tatcattttt gtaaattgtc tcaaggacat ctgttttggt tggaaactgcc caaaaattgc
 1553 3480
 E--> 1554 agtttttatct attcactgga aaaaaaaaaa aaaaaaa
 1555 3517
 1763 <210> SEQ ID NO: 15

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Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

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1764 <211> LENGTH: 2125
1765 <212> TYPE: DNA
1766 <213> ORGANISM: Glycine max
1768 <400> SEQUENCE: 15
E--> 1769 gccaaagctc agaagatgcc agaggaaggt tggacaatgc aggatggaac tccttggcct
1770 60
E--> 1771 ggaaataatc ctagggatca tccgggaatg attcaggtgt ttttaggtca tagtgggggg
1772 120
E--> 1773 ctggatacag atggaaatga gctgcctaga cttgtttatg tttctcgtga gaagcgacca
1774 180
E--> 1775 ggcttccaac atcacaagaa ggctggagct atgaatgctt tgattcgagt ttctgctgtc
1776 240
E--> 1777 ttgaccaatg gtgcatactt tctgaatgtg gattgtgatc actatttcaa taatagcaaa
1778 300
E--> 1779 gccctcaaag aagccatgtg tttcatgatg gatcctgttc ttggaaagaa gacatgctat
1780 360
E--> 1781 gttcaatttc ctcagagatt tgacggcatt gacttgcacg atcgatatgc caatcgcaat
1782 420
E--> 1783 attgtgttct ttgatataca catgaaaggt caggatggtg ttcagggccc agtctatgtg
1784 480
E--> 1785 ggaactgggtt gttgtttcaa taggcaagct ttgtatggtt atgatcctgt tttgactgag
1786 540
E--> 1787 gaagatttgg aacctaacat tattgtaaag agttgttgcg gttctagaaa gaagggaag
1788 600
E--> 1789 ggtggcaata agaagtacag tgacaagaag aaggcgatgg gaagaactga atccactgta
1790 660
E--> 1791 cccatattta atatggaaga catagaggag ggtgttgaag gttatgatga tgaaaggaca
1792 720
E--> 1793 ctacttatgt ctcaaaagag cttggagaag cgttttggtc agtctccagt ttttattgct
1794 780
E--> 1795 gccactttca tggagcaggg tggcattcca ccttcaacga accctgcaac tcttcttaag
1796 840
E--> 1797 gaagcaatcc atgttatcag ctgtgggttac gaagacaaga cagaatgggg caaagagatt
1798 900
E--> 1799 ggatggatct atggctctgt gacagaagat atcttgactg ggttcaagat gcatgctcgt
1800 960
E--> 1801 ggttggattt ccatctattg catgccacct cgcccagcat ttaagggttc tgctcctatc
1802 1020
E--> 1803 aatctttctg atcgtctcaa tcaggtgctt cggtgggcct tgggttcaat tgagatcttt
1804 1080
E--> 1805 ctaagcaggc attgtccctt gtggtatggc tacaatggga agttgaagcc tctgatgagg
1806 1140
E--> 1807 cttgcttata ttaacaccat tgtctaccg tttacctcaa tccattgat tgcttactgt
1808 1200
E--> 1809 acgcttcctg cattttgtct tctcacaat aaatttatta ttctgagat aagcaacttt
1810 1260
E--> 1811 gccagtatgt ggttcattct tctctttgtc tccattttta ccacttcaat tcttgagctt
1812 1320
E--> 1813 aggtggagtg ggttcagtat agaagactgg tggagaaatg aacagttctg gggttatcgt

```

same

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

1814 1380
E--> 1815 gggacatctg cgcacatctctt tgctgtgttc caggggcttc taaaagtgtg tgctgggacg
1816 1440
E--> 1817 gatacaaatt ttactgttac atcgaaggca tcggacgagg atggggactt tgccgagctt
1818 1500
E--> 1819 tatgtgttta aatggacatc acttctcatc cctcctacaa cagtgttat tgtgaatttg
1820 1560
E--> 1821 gttgggattg tggctggtgt atcctatgcc ataaacagtg gttaccagtc ttgggggtcca
1822 1620
E--> 1823 ctatttggca agctgttctt tgctatctgg gtcattgccc atctataccc attcttgaag
1824 1680
E--> 1825 ggtctcttgg gcaggcaaaa tcgtacccca accattgtta ttgtttggtc cgttcttctt
1826 1740
E--> 1827 gcttcaatat tctccttgct gtgggtgagg attgatccct tcacctctga ctccaacaaa
1828 1800
E--> 1829 ttaaccaatg gtcaatgtgg catcaactgt tagttctctt gtatgattca ttttgtgttg
1830 1860
E--> 1831 ttattccctt ttgcttggag atacacaagg ttgctgtcgt gtatatagca agaattttca
1832 1920
E--> 1833 gcctatcaaa gttgtctgga ggattgaacc cctgaaatag atgggaatgt accctctctg
1834 1980
E--> 1835 tttctattat ttatctacat gttccttaca agaatagtca gtagtaatgt tgaggtgtat
1836 2040
E--> 1837 gttatatattt ttccccacag aatataaatt tgttcatgcg aatatttaat gaaagccaac
1838 2100
E--> 1839 aaggctcctgt gttgttttgt tcttt
1840 2125
1965 <210> SEQ ID NO: 17
1966 <211> LENGTH: 2890
1967 <212> TYPE: DNA
1968 <213> ORGANISM: Glycine max
1970 <400> SEQUENCE: 17
E--> 1971 gcacgagctc caccagtta atgatgcata tggcttgtgg ttgacatcag tcactctgtga
1972 60
E--> 1973 aatatggttt gctgtatcat ggataatgga tcagtttcca aaatgggtacc caatacagcg
1974 120
E--> 1975 agaaacatac cttgatcgtc tgtcactcag gtatgaaaaa gaagggaagc catctgagtt
1976 180
E--> 1977 gtccagtgtg gacgtctttg tcagtactgt tgatcccatg aagggaacct cactgattac
1978 240
E--> 1979 agcaaacact gttctatcta tccttgctgt tgattatcca gttgataaag ttgcatgcta
1980 300
E--> 1981 tgtctcagat gatggtgctg ctatgcttac ttttgaagca ctgtctgaga catctgaatt
1982 360
E--> 1983 tgctaggaga tgggttccat tttgtaagaa atacaatatt gagccccggg caccagaatg
1984 420
E--> 1985 gtactttggt cagaagatgg actatctgaa aaataaagta caccagcat ttgtcaggga
1986 480
E--> 1987 aaggagagca atgaagaggg attatgaaga atttaagggtg aggattaaca gtttgggtggc

*same**same*

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

1988 540
E--> 1989 aacagcacaa aagggttcctg aggatggatg gaccatgcaa gatgggactc cttggcctgg
1990 600
E--> 1991 aaataatgtg agggatcatc ctggcatgat tcaggtcttc cttgggcagg atggtgttcg
1992 660
E--> 1993 tgatgttgaa ggaaatgagc taccctcgctt ggtctacgtt tctagagaaa agaggccagg
1994 720
E--> 1995 gtttgatcac cacaaaaagg ctgggtgcaat gaatgctctg gtacgggctt cagcaattat
1996 780
E--> 1997 cactaatgca ccctatcttc tgaatgttga ttgtgatcac tacattaaca atagcaaggc
1998 840
E--> 1999 acttagagaa gctatgtgtt ttatgatgga tcctcaacta gggaaaaagg tttgctatgt
2000 900
E--> 2001 gcaatttcct cagcgatttg atggaattga tagacatgat agatattcaa acagaaatgt
2002 960
E--> 2003 tgtatttttc gatattaaca tgaaaggatt ggatgggata caaggtccaa tatatgtcgg
2004 1020
E--> 2005 aactggatgt gttttcagaa ggtacgcact ttatggatat gatgcacctg ccaagaagaa
2006 1080
E--> 2007 accaccgagc aaaacttgta actggtggcc aaagtgggtg tgcctatgtt gtggtcttag
2008 1140
E--> 2009 aaagaaaaag aatgccaata gtaagaagga gaaaaagagg aaggtgaagc acagtgaagc
2010 1200
E--> 2011 atcaaagcag atacatgcac ttgaaaatat tgaggcgggg aatgaaggaa ccaacaatga
2012 1260
E--> 2013 gaagacatcc aatctgactc aaacaaagtt ggagaagagg tttggacagt ctccagtatt
2014 1320
E--> 2015 tgtagcctcc acacttttgg atgatgggtg agttccacat ggcgtgagtc ctgcatcact
2016 1380
E--> 2017 tttaaaagaa gccatccagg tcatcagttg tggttatgaa gacaaaacag aatggggaaa
2018 1440
E--> 2019 agaagttggg tggatatatg gttctgtgac agaggatatc ttgactggat ttaaaatgca
2020 1500
E--> 2021 ttgccatggt tggcgggtctg tgtattgcat tcctaagcgg cctgcattta aggggtctgc
2022 1560
E--> 2023 gcctatcaac ctttcagatc gtctgcacca agttcttcgg tgggctcttg ggtctgttga
2024 1620
E--> 2025 gatttttttc agcagacatt gtccaatctg gtatggctat ggtgggtggat tgaaattggt
2026 1680
E--> 2027 ggaacgattt tcctacatta actcggtcgt atatccctgg acttccctcc cattgcttgt
2028 1740
E--> 2029 ctactgtact ctaccagcca tatgccttct gactggaaaa tttatcgtac ccgagattag
2030 1800
E--> 2031 caactatgcc agtcttgtgt tcatggccct cttcatatcc attgcagcaa ctggcatcct
2032 1860
E--> 2033 tgagatgcaa tggggcggtg ttagcataga cgactgggtg aggaacgaac agttttgggt
2034 1920
E--> 2035 gatcggaggt gtttcttccc atctatttgc cctatttcag ggtttactga aggtcttggc
2036 1980



RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 2037 tgggtgtgaac acaaacttca ctgtgacctc aaaagcagca gatgatggag aattctcaga
 2038 2040
 E--> 2039 actctacata ttcaagtga catcactctt gatccctcca atgactttac ttatcatgaa
 2040 2100
 E--> 2041 tattgtcggg gtggttgtcg ggatctcaga tgccatcaac aatgggttatg actcatgggg
 2042 2160
 E--> 2043 acctctcttt ggtagattgt tctttgcatt gtgggtgatc ctccatctct accccttctt
 2044 2220
 E--> 2045 gaagggggtg cttggaaaac aagatagaat gcccaaccatt atattgggtt ggtcaatcct
 2046 2280
 E--> 2047 tctggcctcc atcttgactc tcatgtgggt cagaattaac ccgtttgtgt caagagacgg
 2048 2340
 E--> 2049 ccccggtgta gaaatttgtg gattgaattg cgacgagtcg tgaataaaga aaagctgaag
 2050 2400
 E--> 2051 aagaagggtt agttattttt cagctacact gcagtcattg tgaagaatgc agccagcaca
 2052 2460
 E--> 2053 tgcttcacaa agttgcacga attttcggat ggaagtttta tttttcgggt gtgtagagat
 2054 2520
 E--> 2055 taaagagagg aaggggaggg ggctgacaca ttgttacctt gtaatagggt tttttcattt
 2056 2580
 E--> 2057 attctttgat tatattttct gtgggtttta gtgttattct ctttccagtt tcatgtatta
 2058 2640
 E--> 2059 taagaaagag gcattgaatg ataaattatt ccctcttcaa aatgggggat cctcagtcct
 2060 2700
 E--> 2061 aagaaattac ttgggtcatat ttttaggtat gggctcttgt ctgtttaaaa ccatttgtaa
 2062 2760
 E--> 2063 taccgtcaaa actatggata ttcttggtcc tcagatgtgt ttttgtgttt tattatttaa
 2064 2820
 E--> 2065 cactcaggaa ccttttggtt tgattcaatt attcaatggt tggatggcac taaaaaaaaa
 2066 2880
 E--> 2067 aaaaaaaaaa
 2068 2890
 2226 <210> SEQ ID NO: 19
 2227 <211> LENGTH: 1733
 2228 <212> TYPE: DNA
 2229 <213> ORGANISM: Triticum aestivum
 2231 <220> FEATURE:
 2232 <221> NAME/KEY: unsure
 2233 <222> LOCATION: (262)
 2234 <223> OTHER INFORMATION: n = a, c, g or t
 2236 <400> SEQUENCE: 19
 2237 gaagctatgt gcttcctaata ggatecaaac ctaggtccgc aagtctgtta tgtgcagttc 60
 2238 ccacaaaggt ttgatggtat tgataggaat gatcgatatg caaacaggaa cactgtcttt 120
 2239 tttgatatta acttgagggg ccttgacggc attcaaggac cagtttatgt ggggaactgg 180
 2240 tgtgttttca acagaacggc tatctatggt tatgagcccc caattaaggc gaagaagcca 240
 2241 ggtttcttgg catcattatg tnggggcaag aagaaggcaa gcaagtcaaa gaaaaggagc 300
 2242 tcagataaga aaaagtcgaa caagcatgtg gacagttctg ttccagtatt caatctcgaa 360
 2243 gacatagagg aggggtgttg aggtgctggg tttgatgatg agaaatcagt tctcatgtct 420
 2244 caaatgagct tagagaagag atttggccag tcagcagcat ttgttgccct cactctgatg 480

same

see p. 19

RAW SEQUENCE LISTING

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

```

2245 gaatatggtg gtgttctca gtcgtccact ccagaatctc ttttgaaaga agctatccat 540
2246 gtcataagtt gtggctatga ggacaagtct gaatggggaa ctgagattgg ttggatctat 600
2247 ggatctgtca cagaagatat tctaactgga ttcaagatgc acgcaagagg ctggcggtca 660
2248 atctattgca tgcccaagcg cccagctttc aagggatctg ccccatcaa tctttcagat 720
2249 cgtctgaatc aagtgtctgc gtgggctctt ggttctgttg aaattctttt cagccggcat 780
2250 tgccccttat ggtatggcta cggagggcgc ctcaagttcc tggagagatt cgcttacatc 840
2251 aacaccacca tttaccact aacctctctc ccgcttctag tctattgtat attgcctgct 900
2252 atctgtctgc tcaactgaaa gttcatcatg ccagagatta gcaacttggc cagtatctgg 960
E--> 2253 ttaattgcgc tcttctttc aattttcgcc actggtatcc ttgagatgag gtggagtggg
W--> 2254 1020 gttggcattg acgagtggg gaggaatgaa cagttctggg tcattggagg
W--> 2255 tatctctgcc 1080 catctgtttg ccgtctttca gggctctctg aaggtgcttg
W--> 2256 caggtatoga caccaacttc 1140 actgtcacct caaaggctaa tgatgaagaa
W--> 2257 ggcgactttg ctgagctcta catgttcaag 1200 tggacgacgc ttcttatccc
W--> 2258 tccgacgacc attttgatca ttaacatggg cgggtgtcgtt 1260 gctggtacct
E--> 2259 cctacgccat caacagtggg taccaatcat gggggccgct ctttggggaag 1320
E--> 2260 ctcttctttg ccttctgggt gattgttcac ttatacccat tcctcaaggg tcttatgggc
W--> 2261 1380 aggcaaaacc gcacaccgac gattgtcatc gtctgggctg tctctctgc
W--> 2262 ttctatcttc 1440 tccttgetgt gggttcgtgt tgatccatc actaccgctc
W--> 2263 tcgctggccc aaatatccaa 1500 acctgtggca tcaactgcta ggaaagtggg
W--> 2264 agttttaga gacagaaaat ataacagtga 1560 tcgagcgacc acctgtggag
W--> 2265 ccagagaata tttatgttgg ggttgtgaat tactacgttt 1620 gagaaagttg
E--> 2266 tcaaaattga gaaaacacat ttgtaaatag atgtaataga ctatctaccg 1680
E--> 2267 ttttcatgag gttaagctct tcttttttgg aaaaaaaaaa aaaaaaaaaa aaa
E--> 2268 1733
2377 <210> SEQ ID NO: 21
2378 <211> LENGTH: 1029
2379 <212> TYPE: DNA
2380 <213> ORGANISM: Triticum aestivum
2382 <400> SEQUENCE: 21
E--> 2383 gcacgagccg ctctcacca acggccagat ggttgatgac atcccgcggg agcagcacgc
2384 60
E--> 2385 gctcgtgccg tcctacatga ggcggcgccg cggcgggggc aagaggatcc acccgtccc
2386 120
E--> 2387 tttcgcagat cccaaccttc cagtgcacc gagatccatg gaccgctcca aggatctggc
2388 180
E--> 2389 cgcctacgga tatggcagcg tggcctggaa ggagagaatg gagggctgga agcagaagca
2390 240
E--> 2391 ggagcgctg cagcatgtca ggagcgaggg tggcggtgat tgggatggcg acgatgcaga
2392 300
E--> 2393 tctgccacta atggatgaag ctaggcagcc attgtccaga aaagtcccta tatcatcaag
2394 360
E--> 2395 ccgaattaat ccctacagga tgattatcgt tatccggttg gtggttttgg gtttcttctt
2396 420
E--> 2397 ccactaccga gtgatgcac cggcgaaaga tgcatttgca ttgtggetca tatctgtaat
2398 480
E--> 2399 ctgtgaaatc tggtttgca tgtcctgtat tcttgatcag ttcccaaagt ggtttccaat
2400 540
E--> 2401 cgagagagag acttacctgg accgtttgtc actaagggtt gacaaggaag gtcaaccctc
2402 600

```

format error

same error as p. 1

RAW SEQUENCE LISTING

DATE: 11/18/2002

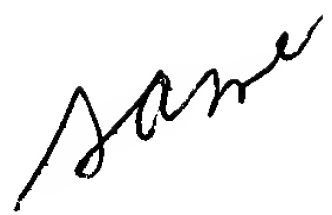
PATENT APPLICATION: US/09/720,383B

TIME: 17:18:51

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

E--> 2403 tcagcttgct ccaatcgact tctttgtcag tacggttgat ccacaaagg aacctccctt
2404 660
E--> 2405 ggtcacagcg aacactgtcc tttccatcct ttctgtggat tatccggttg agaaggtctc
2406 720
E--> 2407 ctgctatggt tctgatgatg gtgctgcaat gcttacgttt gaagcattgt ctgaaacatc
2408 780
E--> 2409 tgaatttgca aagaaatggg ttcctttcag caaaaagttt aatatcgagc ctggtgctcc
2410 840
E--> 2411 tgagtgggtac ttccaacaga agatagacta cctgaaagac aagggttgctg cttcatttgt
2412 900
E--> 2413 tagggagagg agggcgatga agagagaata cgaggaattc aaggtaagga tcaatgcctt
2414 960
E--> 2415 ggttgcaaaa gcccaaaagg ttcctgagga aggatggaca atgcaagatg gaagcccctg
2416 1020
E--> 2417 gcctggaaa
2418 1029



VERIFICATION SUMMARY

DATE: 11/18/2002

PATENT APPLICATION: US/09/720,383B

TIME: 17:18:53

Input Set : A:\BB-1170 USPCTCorrected Sequence Listing.txt

Output Set: N:\CRF4\11182002\I720383B.raw

L:32 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:1 ✓
 M:254 Repeated in SeqNo=1
 L:144 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:3 ✓
 M:254 Repeated in SeqNo=3
 L:499 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:5 ✓
 M:254 Repeated in SeqNo=5
 L:612 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:7 ✓
 M:254 Repeated in SeqNo=7
 L:972 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:9 ✓
 M:254 Repeated in SeqNo=9
 L:1321 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:11 ✓
 M:254 Repeated in SeqNo=11
 L:1438 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:13 ✓
 M:254 Repeated in SeqNo=13
 L:1604 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:192 ✓
 L:1769 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:15 ✓
 M:254 Repeated in SeqNo=15
 L:1971 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:17 ✓
 M:254 Repeated in SeqNo=17
 L:2241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:240 ✓
 L:2253 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1020 SEQ:19 ✓
 L:2254 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2255 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2255 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2256 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2256 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2257 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2257 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2258 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2258 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2259 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 M:254 Repeated in SeqNo=19
 L:2261 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2262 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2262 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2263 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2263 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2264 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2264 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2265 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2265 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
 L:2266 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
 L:2268 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1733 Found:1233 SEQ:19 ✓
 L:2296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:80 ✓
 L:2383 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:21 ✓
 M:254 Repeated in SeqNo=21

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER:

09/720,383B

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length
Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.